

# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address COMMISSIONER FOR PATENTS P O Box 1450 Alexandra, Virginia 22313-1450 www.webje.gov

| APPLICATION NO.   | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|-------------|----------------------|---------------------|------------------|
| 10/721,726  | 11/25/2003  | Gary P. Raden        | MS306092.01         | 5768             |
| 27195 7590 029662009<br>AMIN, TUROCY & CALVIN, LLP<br>127 Public Square |             |                      | EXAMINER            |                  |
|   |             |                      | JEAN GILLES, JUDE   |                  |
| 57th Floor, Key Tower<br>CLEVELAND, OH 44114                            |             |                      | ART UNIT            | PAPER NUMBER     |
|   |             |                      | 2443                |                  |
|   |             |                      |                     |                  |
|   |             |                      | NOTIFICATION DATE   | DELIVERY MODE    |

# Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

docket1@thepatentattorneys.com hholmes@thepatentattorneys.com lpasterchek@thepatentattorneys.com

# Application No. Applicant(s) 10/721,726 RADEN ET AL. Office Action Summary Examiner Art Unit JUDE J. JEAN GILLES 2443 -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --Period for Reply A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS. WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION. Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b). Status 1) Responsive to communication(s) filed on 26 November 2008. 2a) This action is FINAL. 2b) This action is non-final. 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213. Disposition of Claims 4) Claim(s) 1-4.7-32.34-37 and 39-41 is/are pending in the application. 4a) Of the above claim(s) is/are withdrawn from consideration. 5) Claim(s) \_\_\_\_\_ is/are allowed. 6) Claim(s) 1-4,7-32,34-37 and 39-41 is/are rejected. 7) Claim(s) \_\_\_\_\_ is/are objected to. 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement. Application Papers 9) The specification is objected to by the Examiner. 10) ☐ The drawing(s) filed on 25 November 2003 is/are: a) ☐ accepted or b) ☐ objected to by the Examiner. Applicant may not request that any objection to the drawing(s) be held in abevance. See 37 CFR 1.85(a). Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152. Priority under 35 U.S.C. § 119 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some \* c) None of: Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). \* See the attached detailed Office action for a list of the certified copies not received. Attachment(s)

1) Notice of References Cited (PTO-892)

Notice of Draftsperson's Patent Drawing Review (PTO-948)

Information Disclosure Statement(s) (PTO/SB/08)
 Paper No(s)/Mail Date \_\_\_\_\_\_.

Interview Summary (PTO-413)
 Paper No(s)/Mail Date.

6) Other:

5) Notice of Informal Patent Application

Art Unit: 2443

#### DETAILED ACTION

This Office Action is in Reply to communication filed on 11/26/2008.

### Response to Amendment

 In this Reply, claims 1-4, 6-32, 34-37, and 39-41 are currently pending and are presently under consideration. Claims 1, 3, 7, 8, 10, 16, 19, 25, 27, 28, 31, 34, 36 and 37 have been amended. Claim 6 is cancelled. Claims 1-4, 7-32, 34-37, and 39-41 are pending and represent "SYSTEMS AND METHODS FOR STATE MANAGEMENT OF NETWORKED SYSTEMS".

#### Response to Arguments

 Applicant's arguments with respect to claims 1-4, 6-32, 34-37, and 39-41 have been considered but are moot in view of the new grounds of rejection below, necessitated by applicant's amendment to the claims.

Applicant's main points of contention are addressed below:

Point A: In particular, amended independent claim 1 recites, in part, a component that obtains system data corresponding to a system component that resides on a first networked system and to a system component that resides on a second networked system, the second network system is external to the first networked system, and .....

Response: As to point A, see the rejection of claim 1 below and the rejection under 35 U.S.C. 112, first paragraph. Furthermore, Both Rayes and See teach a

Art Unit: 2443

distributed system of interconnected systems (including the Internet and LANs) (Rayes figs 1 and 5, See par. 0040). In See par. 0010, it described the steps obtaining output from both network devices.

Point B: The aggregator aggregates the system data corresponding to the first networked system and the second networked system ...analyzes at least a subset of the system data and generates an output corresponding to respective states of a subset of components of the first and second networked systems, the output utilized to automatically limit aggregate utilization o fat least one aspect of the first or second networked system according to a defined limit on overall utilization.

Response: See rejection of claim 1 below and explanation provided in light of the prior art of See et al.

## Claim Rejections - 35 USC § 112

- 3. The following is a quotation of the first paragraph of 35 U.S.C. 112:
  - The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.
- 4. Claims 1, 7, 10, 16, 19, 25, 28, 34, and 36 rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claims contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventors, at the time the application was filed, had possession of the claimed invention. The term "a system"

Art Unit: 2443

component that resides on a <u>first networked system and to a system component</u>
that resides on a second networked system, the second network system is
external to the <u>first networked system</u>," is not included in the specification. The
current application does not disclose this clamed language and appropriate correction is
required.

### Claim Rejections - 35 USC § 103

- The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
  - 4. Claims 1-4, 7-32, 34-37, and 39-41 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rayes et al (Rayes), U.S Pub. No. 20050086502 A1, in view of See et al (hereinafter See), US 2003/0021283 A1.

Regarding claim 1, Rayes teaches a system embodied on a computer-readable storage medium that facilitates determining a state of a networked system (fig. 1), comprising:

a component that obtains system data corresponding to a system component that resides on <u>a first</u> networked system (0048; controller 110) <u>and to a system</u> <u>component that resides on a second network system, the second networked system is</u> external to the first networked system (0045-0047); and

Art Unit: 2443

an aggregator that aggregates the system data <u>corresponding to the first</u>

<u>networked system and the second networked system</u> (figs. 1, 5; par. 0045) in

accordance with predetermined rules (0060) analyzes at least a subset of the system data and (0055-0057, 0060, 0120, item 106, 102a-n).

Although Rayes discloses substantial features of the invention, Rayes does not distinctly teach "generates an output corresponding to respective states of a subset of components of the first and second networked systems, the output utilized to automatically limit aggregate utilization of at least one aspect of the first or second networked system according to a defined limit on the aggregate utilization".

Nonetheless, this feature is well known and would have been\_an obvious modification to the system shown by Rayes as evidenced by See.

In the same technological environment, See teaches in par. 0010 "...a first network device coupled to the data store for managing the network policies. The network management system further includes a second network device configured to retrieve a first set of network policies associated with the second network device from the data store and enforce the retrieved policies for control of network elements associated with the second network device..." and further in par. 0022 discloses "...the network policies require authentication of users on network ports during non-working hours and not require authentication during normal working hours, automatically add links to a link aggregation group if the utilization on the aggregation group reaches a certain threshold, and control other aspects of the network infrastructure...". In an attempt to efficiently manage devices in distributed networks, avoiding costs and

Art Unit: 2443

delays in the making of management decisions, this approach of aggregating devices based on thresholds and other control aspects of the networks makes sense.

Accordingly, a person of ordinary skill in the art would have readily recognized the desirability and advantages of modifying the system shown by Rayes to employ the technique shown by See enabling "a network management platform that allows the making and enforcement of network management decisions over multiple network devices in an efficient and consistent manner., and further desirably implementing a network management platform that is scalable as the size of the network devices increases" (See, par. 0008). By this rationale, claim 1 is rejected.

Regarding claims 2-4, 7-32, 34-37, and 39-41 the combination Rayes-See discloses:

2.

The system of claim 1, additionally comprising a remote access component that provides a user with remote access to the output (Rayes; 0125).

3.

The system of claim 1, the component comprising a polling component that polls the system components to obtain the system data (Rayes; 0048).

4.

The system of claim 1, the aggregator comprising a distributed database engine (Rayes; item 124).

7.

The system of claim 5, the predetermined rules comprising aggregation of data with a plurality of distinct networked systems (Rayes; figs. 1, 5; par. 0045; 0120).

Art Unit: 2443

The system of claim 1, at least one of the plurality of system components comprising a system component that sends data to the component unprompted.

- The system of claim 8, the unprompted system component utilizes at least one-of unicasting, multicasting, and or broadcasting techniques to send data to the component (Rayes: 0047-0048).
- 10. The system of claim 1, the system components comprising a plurality of components on a server of the first networked system or the second networked system (Rayes; items 330, 126).
- 11. The system of claim 1, the system components comprising at least one of a running process, a data source, and or a data log (Rayes; 0088).
- 12. The system of claim 1, the output comprising hidden information obtained via data mining of aggregated system data (Rayes; 0051, 0060, and 0120).
- 13. The system of claim 12, the hidden information comprising at least one of system diagnosis information and or system prognosis information (Rayes; 0063, and 0087).
- 14. The system of claim 1, the output comprising a user customizable output (Rayes; 0063, and 0087).
- 15. The system of claim 1, the output comprising a status report. (Rayes; 0063, and 0087).
- 16. The system of claim 15, the status report relating to at least one of system

Art Unit: 2443

performance data, system health data, and or system utilization data of the first and second networked systems (Rayes; 0063, and 0087, figs. 1, 5; par. 0045).

- 17. The system of claim 1, the output comprising at least one schema table to provide optimal access of data relating to the output (Rayes; 0125).
- 18. The system of claim 1, the output utilized to detect faulty errors in at least one of the networked system (Rayes; 0044, 0047; figs. 1, and 5).
- 19. The system of claim 1, the output utilized to provide automatic system-software updates to at least one of the system components in response to the state of the subset of components of the first and second networked systems (Rayes; 0128; figs. 1, 5; par. 0045).
- 20. The system of claim 1, the output comprising at least one system control parameter (Raves: 0053, and 0121).
- 21. The system of claim 20, the system control parameter comprising at least one of a load shed command or a load balancing command (Rayes; 0053, and 0121).
- 22. The system of claim 20, the system control parameter comprising a security preservation action to maintain security of at least one first or second networked systems (Rayes; 0048, and 0053).

Art Unit: 2443

28.

23. The system of claim 20, the system control parameter comprising a remedial action to maintain operation of at least one system component on the networked system (Rayes; 0048).

- 24. The system of claim 1, the state comprising at least one of a previous state, a current state, and or a future state (Rayes; 0053, 0055, and 0059).
- 25. The system of claim 1, the state comprising a health status state of the first or second networked system (Rayes; 0048, and 0055).
- 26. The system of claim 25, the health status state comprising at least one consisting of a previous health status state, a current health status state, and or a future health status state (Rayes; 0053, 0055, and 0059).
- 27. The system of claim 1, at least a portion of the system data corresponding to the system components is generated by at least one health monitor, a performance monitor, and or a utilization monitor (Rayes; 0048, and 0055).

A computer-implemented method for facilitating state determination of a networked system (Rayes; figs 1-3), comprising:

obtaining system data corresponding to a system component that resides on a first the networked system and a system component that resides on a second networked system, the first and second networked systems do not share a direct communication link, the system data contains at least information regarding utilization of system

Art Unit: 2443

resources pertaining to the first and second networked systems (Rayes; figs 1, and 5, 0048, 0069-0070, 0078; See 0010, 0022);

aggregating, according to predetermined rules, at least a portion of the system data corresponding to at least a subset of the plurality of system components; analyzing at least a portion of the aggregated system data; generating an output corresponding to respectives states of the subset of the system components (Rayes; 0055-0057, 0060, 0120, item 106, 102a-n).

utilizing the output to provide an automatic software update to at least one system component to mitigate a detected error state (See 0041); and

masking alerts associated with the error state when a software update is not available (see Rayes, 0059-0061). The same motivation and reason to combine utilized for the rejection of claim 1 is also valid for this claim. By this rationale claim 28 is rejected.

- 29. The method of claim 28, further comprising: sending the output to a selectable recipient at a selectable rate in a selectable manner (Rayes; 0125; 0121).
- 30. The method of claim 28, further comprising: customizing the output according to a set of rules determined by a user (Rayes; 0125; 0121).
- 31. The method of claim 28, further comprising: controlling an aspect of the networked system in response to the output corresponding to the state of the subset of the system components (Raves: 0125: 0121: 0087, 0063).

Art Unit: 2443

32. The method of claim 31, the aspect comprising an operational system parameter responsible for maintaining operation of the networked system (Rayes; 0038).

34. A system embodied on a computer-readable storage medium that facilitates determining a state of a networked system, comprising:

means for obtaining system data corresponding to at least a subset of a plurality of system components that reside on a first networked system and a second networked system, the system data contains at least information regarding utilization of system resources (Rayes; 0048, 0069-0070, 0078; See 0010, 0022);

and means for aggregating at least a portion of the obtained data, the aggregated data comprises system data pertaining to the first and second networked systems (See 0010, 0022); and means for analyzing at least a subset of the portion of the obtained data to generate an output corresponding to a state of the subset of the plurality of system components means for prioritizing utilization of at least one resource on the networked system(Rayes; 0055-0057, 0060, 0120, item 106, 102a-n); and means for automatically curtailing utilization of a resource by a first user of the networked system when a second user with a higher utilization priority requires the same resource (). The same motivation and reason to combine utilized for the rejection of claim 1 is also valid for this claim. By this rationale claim 34 is rejected.

35. A system that employs at least one system of claim 1 to provide a remotely accessible state determination service (Rayes; 0125).

Art Unit: 2443

36. The system of claim 35, the state determination service comprising an aggregation, analysis, and control service for at least one networked system pertaining to at least one system administrator, a security action is implemented by the state determination service for the first networked system or the second networked system based on an input from the at least one system administrator. (Rayes; 0089, 0109, and 0120; figs 1, and 5).

- 37. A method that employs the method of claim 28 in a multiple networked system service environment to determine and predict common errors across at least a subset of the networked systems (Rayes; 0044, and 0047).
- 39. A computer readable medium having stored thereon computer executable components of the system of claim 1. A device employing the method of claim 28 comprising at least one of a computer, a server, and or a handheld electronic device (Rayes; items 330, 126).
- 41. A device employing the system of claim 1 comprising at least one of a computer, a server, and or a handheld electronic device (Rayes; items 330, 126).

### Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, THIS ACTION IS MADE FINAL. See MPEP

Art Unit: 2443

§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from examiner should be directed to Jude Jean-Gilles whose telephone number is (571) 272-3914.

The examiner can normally be reached on Monday- Friday from 8:00 AM to 5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tonia Dollinger, can be reached on (571) 272-4170. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-3301.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (571) 272-0800.

/Jude J Jean-Gilles/

Primary Examiner, Art Unit 2443

Page 14

Art Unit: 2443

JJG

February 01, 2009